REMARKS

Claims 23-24 and 27-48 are pending in this application.

Claims 28-37 and 40-48 have been rejected.

Claims 23, 24, 27, 38 and 39 have been objected to.

Claims 23, 28, 29, 30, 31, 33, 34, 35, 36, 38, 40, 41 and 46 have been amended.

Reconsideration and full allowance of Claims 23-24 and 27-48 are respectfully requested.

I. AMENDMENTS TO SPECIFICATION

Some paragraphs of the specification have been amended to correct typographical errors in some reference numerals. The correct numerals are shown in the drawings. No new matter has been added to the specification as a result of these amendments.

II. AMENDMENTS IN RESPONSE TO CLAIM OBJECTIONS

Claims 23, 24, 27, 38, 39 and 46 were objected to due to a lack of antecedent basis. The Applicants have amended Claim 23 and Claim 38 to identify the outputs of the start circuit as a "first output" and a "second output." This amendment removes the insufficient antecedent basis problem for the outputs of the start circuit. The Applicants have also amended Claims 23, 33, 38, 41 and 46 to remove the word "possible" in the phrase "possible operating states" and the phrase "possible values." This amendment removes the insufficient antecedent basis problem for the word "possible."

III. ALLOWABLE SUBJECT MATTER

The Applicants thank the Examiner for the indication that Claims 23, 24, 27, 38 and 39 would be allowable if rewritten or amended to overcome the objections set forth in the Office Action. (Office Action, Page 10, Lines 3-5). The Applicants have amended the claims to overcome the objections. Based on these amendments, the Applicants respectfully request that Claims 23, 24, 27, 38 and 39 be allowed.

IV. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 28, 29, 33, 36, 46 and 47 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,362,612 to Harris ("*Harris*") in view of U.S. Patent No. 6,445,167 to Marty ("*Marty*"). The Office Action rejects Claims 30, 31, 34, and 35 under 35 U.S.C. § 103(a) as being unpatentable over *Harris*, *Marty*, and U.S. Patent No. 5,867,013 to Yu ("*Yu*"). The Office Action rejects Claims 32 and 37 under 35 U.S.C. § 103(a) as being unpatentable over *Harris*, *Marty*, and U.S. Patent No. 5,471,131 to King et al. ("*King*"). The Office Action rejects Claims 40 and 41 under 35 U.S.C. § 103(a) as being unpatentable over *Harris*, *Marty*, and U.S. Patent No. 6,362,605 to May ("*May*"). The Office Action rejects Claims 42, 43 and 48 under 35 U.S.C. § 103(a) as being unpatentable over *Harris*, *Marty*, *May*, and *King*. The Office Action rejects Claim 44 under 35 U.S.C. § 103(a) as being unpatentable over *Harris* and *King*. The Office Action rejects Claim 45 under 35 U.S.C. § 103(a) as being unpatentable over *Harris*, *King*, and *May*. These rejections are respectfully traversed.

During *ex parte* examinations of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260,

1262, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of non-obviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 USPQ 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not be based on an applicant's disclosure. MPEP § 2142.

Regarding Claims 28-37 and 40-43, Claims 28 and 40 recite that a "start circuit" has "an output coupled to [an] output of [an] adjustment circuit," where the "adjustment circuit" has an output coupled to a "current source" and inputs coupled to a "circuit branch" and a "further base-emitter diode."

The Office Action acknowledges that *Harris* fails to disclose a start circuit having an output coupled to the output of the adjustment circuit. The Office Action then asserts that *Marty* discloses a start-up circuit 20 and that it would be obvious to modify *Harris* with *Marty*.

Marty recites that a regulator 10 includes an amplifier 5 and a start-up circuit 20. (*Marty*, Column 4, Lines 15-20 and Lines 45-47). The Office Action does not explain how the start-up circuit 20 represents a "start circuit" having "an output coupled to [an] output of [an] adjustment circuit," where the "adjustment circuit" has an output coupled to a "current source" and inputs coupled to a "circuit branch" and a "further base-emitter diode." More specifically, the Office Action does not explain how the amplifier 5 of *Marty* anticipates an "adjustment circuit" that would be used in the circuit of *Harris* or why the start-up circuit 20 of *Marty* would be coupled to an output of the alleged "adjustment circuit" of *Harris*. Without that, the Office Action cannot simply assume that it would be obvious to modify *Harris* by including the start-up circuit 20 of *Murty*.

For these reasons, the Office Action does not establish that a person skilled in the art would modify *Harris* with *Marty* to include a "start circuit" coupled to an "adjustment circuit" as recited in Claim 28 (and its dependent claims). For these reasons, the Office Action does not establish that a person skilled in the art would modify *Harris* with *Marty* and *May* to reach the claimed invention recited in Claim 40 (and its dependent claims).

The Applicants have amended Claims 23, 28, 29, 30, 31, 33, 34, 35, 36, 38, 40, 41 and 46. The Applicants respectfully submit that these amendments put Claims 23-24 and Claims 27-48 in condition for allowance. Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claims 23-24 and 27-48.

Regarding Claims 44 and 45, Claims 44 and 45 recite a "correction circuit" coupled to an "adjustment circuit" and cooperable therewith for "at least partially offsetting a drop-off in [a] band-gap reference voltage caused by [a] further base-emitter diode."

The Office Action acknowledges that *Harris* fails to disclose these elements of Claims 44 and 45. The Office Action then asserts that *King* discloses these elements of Claims 44 and 45 and that it would be obvious to modify *Harris* with *King*.

King recites voltage reference circuitry 326 that includes a correction circuit 5300. (*King*, Column 28, Lines 47-55). The correction circuit 5300 corrects the output voltage of the voltage reference circuitry 326 as the output voltage varies with temperature. (*King*, Column 29, Lines 15-61). However, *King* lacks any mention that the correction circuit 5300 is used for "at least partially offsetting" a "drop-off" in a reference voltage that is "caused by [a] further base-emitter diode."

The Office Action simply identifies a voltage reference circuit in *King* that includes a correction circuit and assumes that the correction circuit of *King* performs the same function recited in Claims 44 and 45. This assumption is incorrect. The Office Action does not establish that the correction circuit 5300 of *King* "at least partially offset[s]" a "drop-off" in a reference voltage that is "caused" by a "further base-emitter diode" as recited in Claims 44 and 45.

For these reasons, the Office Action does not establish that a person skilled in the art would modify *Harris* with *King* to include a "correction circuit" coupled to an "adjustment circuit" as recited in Claim 44. The Office Action does not appear to rely on *May* as disclosing analogous elements recited in Claim 45. For these reasons, the Office Action does not establish that a person skilled in the art would modify *Harris* with *King* and *May* to reach the claimed invention recited in Claim 45.

Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claims 44 and 45.

V. CONCLUSION

The Applicants respectfully assert that all pending claims in this application are in condition for allowance and respectfully request full allowance of the claims.

The Applicants' attorney has made the amendments and arguments set forth above in order to place this Application in condition for allowance. In the alternative, the Applicants' attorney has made the amendments and arguments to properly frame the issues for appeal. In this Amendment, the Applicants make no admission concerning any now moot rejection or objection, and affirmatively denies any position, statement or averment of the Examiner that was not specifically addressed herein.

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SUMMARY

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned attorney at the telephone number indicated below or at *wmunck@munckbutrus.com*.

The Commissioner is hereby authorized to charge any fees connected with this communication (including any extension of time fees) or credit any overpayment to the Munck Butrus Deposit Account No. 50-0208.

Respectfully submitted,

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